

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

- 1.-4. (cancelled).
5. (previously presented) A method for identifying a test substance which modulates human G-protein coupling receptor-like protein (CRTH2) activity, said method comprising:
 - (a) contacting human CRTH2 with prostaglandin D2 (PGD₂) in the presence of a test substance, and
 - (b) comparing activity of the human CRTH2 of (a) with activity of a human CRTH2 contacted with PGD₂ in the absence of the test substance, wherein when a change in activity is detected between the human CRTH2 contacted with PGD₂ in the presence of the test substance and the human CRTH2 receptor contacted with PGD₂ in the absence of the test substance, said test substance is determined to be a modulator of CRTH2 activity.
6. (cancelled).
7. (currently amended) The method according to claim 5, further comprising assaying activity modulating effects of said test substance on ~~wherein the test substance modulates human CRTH2 activity, but does not modulate DP receptor activity,~~ wherein said assaying is performed by:

(a) contacting DP receptor with prostaglandin D2 (PGD₂) in the presence of the test substance identified in claim 5, and

(b) comparing activity of the DP receptor of (a) with activity of a DP receptor contacted with PGD₂ in the absence of the test substance, wherein when a change in activity is detected between the DP receptor contacted with PGD₂ in the presence of the test substance and the DP receptor contacted with PGD₂ in the absence of the test substance, said test substance is determined to possess activity modulating effects on DP receptor.

8. (currently amended) The method according to claim 56, wherein said change in activity is a decrease in the test substance inhibits human CRTH2 activity.

9. (currently amended) The method according to claim 56, wherein said change in activity is an increase in the test substance promotes human CRTH2 activity.

10. (currently amended) The method according to claim 5, wherein the change in activity further comprising contacting wherein modulation of human CRTH2 activity is caused by binding of the test substance to human CRTH2.

11. (previously presented) The method according to claim 5, wherein the human CRTH2 is human CRTH2 present on a cell.

12. (currently amended) The method according to claim 11, wherein the change in human CRTH2 activity is an increase in an intracellular concentration of Ca²⁺, enhancement of migration, or down modulation of CRTH2 molecules at a cell surface.

13. (previously presented) The method according to claim 11, wherein the cell is an established mammalian cell line.

14. (previously presented) The method according to claim 13, wherein the mammalian cell line is a cell line selected from the group consisting of K562 line, Jurkat line, HEK293 line, and CHO line.

15. (previously presented) The method according to claim 5, wherein said PGD₂ is labeled with a marker.

16. (previously presented) The method according to claim 5, wherein the test substance is a substance selected from the group consisting of a sedative, a hypnotic, an analgesic, a blood pressure regulating drug, a platelet aggregation inhibitor, a drug for circulatory organs, a drug for suppressing motions of the stomach and the intestine, an anti-gastric ulcer drug, an allergy therapeutic drug, an anti-inflammatory drug, and a drug for preventing and/or treating glaucoma.